CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 93-066
NPDES NO. CA0038369

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

SOUTH BAYSIDE SYSTEM AUTHORITY
REDWOOD CITY, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter the Board) finds that:

1. South Bayside System Authority(SBSA), hereinafter called the Discharger, submitted a report of waste discharge dated November 16, 1992 for reissuance of NPDES Permit No. CA0038369.

2. The Discharger presently discharges an average dry weather flow (ADWF) of about 15 million gallons per day (mgd) from its advanced secondary treatment plant which has a current dry weather design capacity of 24.0 mgd. Treatment facilities consist of primary clarifiers, fixed film reactors, aeration tanks, final clarifiers, dual media filters, and chlorination and dechlorination equipment. This plant treats domestic and industrial wastewater from Belmont, West Bay Sanitary district, Redwood City, and San Carlos. The treated wastewater is discharged into the deep water channel of lower San Francisco Bay, a water of the State and United States, at a point approximately 3.5 miles southerly from the San Mateo-Hayward Bridge through a submerged diffuser about 6800 feet offshore at a depth of 50 feet below the water surface (Latitude 37 deg., 33 min., 48 sec.; longitude 122 deg., 12 min., 55 sec.). The advanced secondary treatment wastewater treatment plant discharges about 2.5 miles from the Foster City shellfish beds.

3. The discharge is presently governed by Waste Discharge Requirements Order No. 88-070 which allows discharge into San Francisco Bay.

4. The Discharger has requested an increase in the authorized ADWF treatment plant capacity from 24 mgd to 30 mgd.

5. The United States Environmental Protection Agency (EPA) has an antidegradation policy as described in regulation 40 CFR 131.12. EPA guidance to implement 40 CFR 131.12 may require that an antidegradation analysis be made when an increase in wastewater discharge is proposed. An antidegradation policy was also adopted by the State Water Resources Control Board in Resolution No. 68-16("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). It provides conditions under which a change in water quality is allowable.

6. The Discharger has also requested permission to use the oxidation ponds at the SBSA site for biosolids treatment and/or seasonal storage.

7. The joint power agreement between the Cities of Belmont, Redwood City, and San Carlos and West Bay Sanitary District gives the Discharger legal authority and responsibility to require compliance with pretreatment standards for all major contribution industries.

8. The Board amended its Water Quality Control Plan for the San Francisco Bay Region(Basin Plan) on September 16, 1992, and the State Water Resources Control Board(State Board) approved it on April 27, 1993. The Board amended the Basin Plan on October 21, 1992 to adopt a site-specific water quality objective of 4.9 ug/l for copper for San Francisco Bay and a deep water marine effluent limit of 37 ug/l for copper. This amendment has not yet been approved by the State Board. The Basin Plan identifies beneficial uses and water quality objectives for surface waters in the region, as well as effluent limitations and discharge prohibitions intended to protect beneficial uses.

9. The State Board adopted the Enclosed Bays and Estuaries Plan on April 11, 1991. The Enclosed Bays and Estuaries Plan contains a water quality objective of 2.9 ug/l for copper. This permit contains an effluent limit for copper 17 ug/l based on the water quality objective in the enclosed Bays and Estuaries Plan. This permit contains a reopener clause so that once the site-specific water quality objective for copper for San Francisco Bay is fully effective the revised effluent limit may be amended into this permit.

10. This Order implements the plans, policies and provisions of the Board's Basin Plan, and the State Board's California Enclosed Bays and Estuaries Plan.

11. The Basin Plan contains water quality objectives for lower San Francisco Bay and contiguous waters. The beneficial uses of lower San Francisco Bay and contiguous water are:

a. Water Contact Recreation
b. Non-contact Water Recreation
c. Wildlife habitat
d. Preservation of Rare and Endangered Species
e. Estuarine Habitat
f. Fish Migration and Spawning
g. Industrial Service Supply
h. Shellfish Harvesting
i. Navigation
j. Commercial and Sport Fishing

12. During wet weather, receiving water coliform limits are frequently violated due to the presence of large volumes of contaminated surface runoff.

13. Protection of shellfish harvesting as a beneficial use during wet weather will often not be possible unless significant resources are devoted to improved control and/or treatment of contaminated runoff. Until such improvements are achieved, the quality of waters overlying the shellfish beds during wet weather will most often be controlled by the amount and type of runoff received, not the Discharger's effluent.

14. The Regional Board in Order No. 84-6 revised the Discharger's wastewater treatment requirements from tertiary-level requirements to advanced secondary requirements during the wet season when beneficial uses would not be compromised further than they already are by stormwater runoff.

15. In 1988 the State Department of Health Services (DOHS) approved relaxation of Discharger's summer total coliform effluent limit to 23 MPN per 100 ml provided the Discharger continues to filter its effluent prior to discharge to San Francisco Bay.

16. In 1988 the State Department of Fish and Game did not object to the higher dry weather coliform effluent limit in Finding #15 provided the Discharger continues to filter its effluent prior to discharge to San Francisco Bay.

17. In 1988 SBSA agreed to drop its request for relaxation of BOD, TSS, and wet weather coliform limits and agreed to continue using its filters prior to discharge to San Francisco Bay.

18. An Operation and Maintenance Manual is maintained by the Discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies,

process control monitoring, and maintenance activities. In order to remain a useful and relevant document, this manual should be kept undated to reflect significant changes in plant facilities or activities.

19. The Discharger has implemented and is maintaining an EPA approved Local Pretreatment Program for source control and application of pretreatment standards in accordance with Regional Board Order No. 84-60.

20. SBSA is nearing the end of the variability phase of the chronic toxicity testing program and no pattern of toxicity has been found.

21. Federal Regulations for stormwater discharges were promulgated by the United States Environmental Protection Agency on November 16, 1990. The regulations [40 Code of Federal Regulations, Parts 122, 123, and 124] require specific categories of industrial activities which discharge storm water associated with industrial activity (industrial storm water) to obtain an NPDES permit and to implement Best Technology Economically Available (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial storm water discharges. The storm water flows from the wastewater treatment facility process areas are directed to the wastewater treatment plant headworks and are treated along with the wastewater discharged to the treatment plant. These storm water flows constitute all industrial storm water at this facility and consequently this permit regulates all industrial storm water discharge at this facility.

22. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (California Environmental Quality Act) pursuant to Section 13389 of the California Water Code.

23. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.

24. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.

2. The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from the collection system or pump stations tributary to the treatment plant is prohibited. Bypassing portions of process units and partial bypassing of Dual Media Filters performed in accordance with provisions of a Operational Plan submitted by SBSA and approved by the Executive Officer shall not be considered violations of this permit.

3. The average dry weather flow shall not exceed 24.0 mgd. Average shall be determined every three consecutive dry weather months each year.

B. EFFLUENT LIMITATIONS

1(a). Effluent discharged shall not exceed the following limits except as provide in B.1(b):

Constituent	Units	Monthly Average	Weekly Average	Maximum Daily	Instantaneous Maximum
a. Settleable Solid	ml/l-hr	0.1	--	--	0.2
b. $CBOD_5$	mg/l	8	12	16	--
c. Total Suspended Solids	mg/l	8	12	16	--
d. Oil & Grease	mg/l	10	--	20	--
e. Total Chlorine Residual (1)	mg/l	--	--	--	0.0
f. Turbidity	NTU	10	--	20	--

1(b). During the months of October through April inclusive the following limitations shall apply:

Constituent	Units	Monthly Average	Weekly Average	Maximum Daily	Instantaneous Maximum
a. Settleable Solid	ml/l-hr	0.1	--	--	0.2
b. $CBOD_5$	mg/l	16	24	32	--
c. Total Suspended Solids	mg/l	16	24	32	--
d. Oil & Grease	mg/l	10	--	20	--
e. Total Chlorine Residual (1)	mg/l	--	--	--	0.0
f. Turbidity	NTU	20	--	40	--

(1) Requirement defined as below the limit of detection in standard test methods.

2. pH: The pH of the effluent shall not be less than 6.5, nor greater than 8.5.

3. Total Coliform Bacteria: The treated wastewater, at some place in the treatment process prior to discharge, shall meet the following limits of bacteriological quality: The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five (5) consecutive samples shall not exceed 23 MPN/100 ml; and, any single sample shall not exceed 240 MPN/100 ml.

4. Effluent Toxicity

4.1 Acute Toxicity

The survival of organisms in undiluted effluent shall be an eleven (11) sample median value of not less than 90 percent survival, and an eleven (11) sample 90 percentile value of not less than 70 percent survival. The eleven sample median and 90th percentile effluent limitations are defined as follows:

11 sample median: If five or more of the past ten samples are less than 90 percent survival, then survival of less than 90 percent of the next, eleventh sample represents a violation of the effluent limitation.

90th percentile: If one or more of the past ten samples is less than 70 percent survival, then survival of less than 70 percent on the next, eleventh, sample represents a violation of the effluent limitation.

4.2 Chronic Toxicity

All permit amendments contained in Regional Board Order No. 92-104, the Blanket Chronic Toxicity Order, are hereby included in this Order.

5. 85 Percent Removal, BOD and TSS: The arithmetic mean of the biochemical oxygen demand (five-day, 20°C) and total suspended solids values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.

6. Representative samples of the effluent E-001 shall not exceed the following limits:

6.1 Limits for Toxic Pollutants

The effluent shall not exceed the following limits (f):
[Units for all limits are in ug/l]

Constituent	Monthly Average(b)	Daily Average(b)
Arsenic		200
Cadmium		30
Chromium (VI) (c)		110
Copper		17
Lead(g)	---	53
Mercury	0.21	1
Nickel (g)		65
Selenium(g)		50
Silver		23
Zinc(g)		580

6.2 Limits for Toxic Pollutants

The effluent shall not exceed the following limits (f):
[Units for all limits are in ug/l]

Constituent	Monthly Average(b)	Daily Average(b)
1,2 Dichlorobenzene(d)	180,000	
1,3 Dichlorobenzene	26000	
1,4 Dichlorobenzene	640	
2,4,6 Trichlorophenol	10	
Aldrin	0.0014	
A-BHC	0.13	
Benzene	210	
B-BHC	0.46	
Chlordane (d)	0.00081	0.04
Chloroform	4800	
Cyanide (e)		25
DDT (d)	0.006	0.01
Dichloromethane	16000	
Dieldrin	0.0014	0.019
Endosulfan (d)	20	0.087
Endrin (d)	8	0.023
Fluoranthene	420	
G-BHC (Lindane)	0.62	1.6
Halomethanes (d)	4800	
Heptachlor	0.0017	0.036
Heptachlor Epoxide	0.0007	
Hexachlorobenzene	0.0069	
PAHS (d)	0.31	150
PCBS (Total) (d)	0.0007	0.3
Pentachlorophenol (g)	82	79

Phenol		500	
TCDD Equivalents (d)		1.4E-07	
Toluene	3,000,000		
Toxaphene (g)		0.0069	0.002
Tributyltin		0.05	

Footnotes:

a. As, Cd, Cr, Zn, Hg are based on plant performance, all other limits are based on marine water quality objectives, and are intended to be achieved through secondary treatment and, as necessary, pretreatment and source control.

b. Limits apply to the average concentration of all samples collected during the averaging period (Daily = 24-hour period; Monthly = Calendar month).

c. The Discharger may meet this limit as total chromium.

d. See California Inland Surface Waters Plan, April 1991, Definition of Terms.

e. The Discharger may demonstrate compliance with this limitation by measurement of weak acid dissociable cyanide.

f. All analyses shall be performed using current EPA Methods, as specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition. Detection limits, practical quantitation levels, and limits of quantitation will be taken into account in determining compliance with effluent limitations. Guidance on these compliance determinations will be developed by the Regional Board during 1993.

g. Effluent limitation may be met as a 4-day average. If compliance is to be determined based on a 4-day average, then concentrations of four 24- hour composite samples shall be reported, as well as the average of four.

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;

c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State at any place within one foot of the water surface:

a. Dissolved Oxygen: 5.0 mg/l, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

b. Dissolved Sulfide 0.1 mg/l, maximum

c. pH: Variation from normal ambient pH by more than 0.5 pH units.

d. Un-ionized Ammonia: 0.025 mg/l as N, annual median; 0.16 mg/l as N, maximum.

e. Nutrients: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

D. SLUDGE HANDLING AND DISPOSAL REQUIREMENTS

1. All sludge treatment, processing, storage or disposal activities under the Discharger's control shall be in compliance with current state and federal regulations.

2. The Board may amend this Order prior to the expiration date if necessary to accommodate changes in applicable state or federal sludge regulations, or changes in the Discharger's sludge management procedures.

3. The Discharger shall notify the Board, in writing, prior to any changes in its sludge handling and disposal practices.

4. The treatment, processing, storage or disposal of sludge by the Discharger shall not create a condition of pollution or nuisance as defined in Section 13050 (1) and (m) of the California Water Code.

5. The treatment, processing, storage or disposal of sludge by the Discharger shall not cause waste material to be discharged to, or deposited in, waters of the State, nor cause degradation of groundwaters.

6. Sludge storage facilities under the Discharger's control shall be operated and maintained in such a manner as to provide adequate protection from surface runoff, erosion, or other conditions which would cause drainage from the waste materials to escape from the storage facility site(s).

E. PROVISIONS

1. Requirements prescribed by this order supersede the requirements prescribed by Order No. 88-070. Order No. 88-070 is hereby rescinded.

2. Where concentration limitations in mg/l or ug/l are contained in this Permit, the following Mass Emission Limitations shall also apply:

   (Mass Emission Limit in lbs/day) = (Concentration Limit in mg/l) x) Actual Flow in million gallons per day averaged over the time interval to which the limit applies) x 8.34 (conversion factor).

3. Effluent Toxicity

   Acute Toxicity

   Compliance with the acute toxicity limitation in effluent limitation B.4.1 of this order shall be evaluated by measuring survival of test fishes exposed to undiluted effluent of 96 hours. Each fish species represents a single sample. The toxicity tests will be performed according to protocols approved by the U.S. EPA or State Board or published by the American Society for Testing and Materials (ASTM) or American Public Health Association. Two fish species will be tested

concurrently. These shall be the most sensitive two species determined from concurrent screening(s) species: three-spine stickleback, rainbow trout and fathead minnow. If concurrent screenings have been conducted prior to this permit reissuance, the existing data may be submitted to the Board. If such information is found to meet the requirements of the Basin Plan, further screenings would not be required.

The Regional Board may consider allowing compliance monitoring with only one (the most sensitive, if known) fish species, if the following condition is met: the discharger can document that the acute toxicity limitation, specified above, has not been exceeded during the previous three years, or that acute toxicity has been observed in only one of two fish species.

Department of Fish & Game has requested that the anadromous race of rainbow trout (steelhead) should be considered as the test species to determine acute toxicity of the effluent.

Chronic Toxicity

All permit amendments contained in Regional Board Order No. 92-104, the Blanket Chronic Toxicity Order, are hereby included in this Order.

4. The discharger shall submit a technical report acceptable to the Executive Officer summarizing the results of a minimum of six (6) effluent sample analyses for the constituents listed in Section B.6.2 (three in wet season, three in dry season), with the exception of TCDD equivalents [dioxin] for which three (3) analyses shall be sufficient). The report shall include the limit of quantitation (LOQ), method detection limit (MDL) and practical quantification limit (PQL) achieved at the SBSA laboratory and an evaluation of compliance with the effluent limitations for each constituent. For each constituent, the LOQ, MDL, and PQL should be less than the effluent limit, where reasonable and technically feasible. For constituents analyzed outside of the SBSA laboratory, MDLs and PQLs should be provided to the SBSA by outside laboratories, and included in this technical report. The technical report shall contain recommendations on effluent sampling and analysis, both with respect to type and frequency of analysis. This NPDES permit shall be subsequently modified to include effluent sampling for the subject constituents.

5. This permit may be reopened to amend the effluent limit for copper once the site-specific water quality objective for copper for San Francisco Bay in fully effective.

6. The discharger will conduct a two year wet weather study of shoreline impacts of operating at an effluent limit of 240 MPN/100 ml coliform median value. After the review of the study, the Board may modify the current moving median value for the MPN of total coliform in any five (5) consecutive effluent samples of 23 coliform organism per 100 milliliter to 240 MPN/100ml for the wet weather condition.

7. Prior to the conversion of the existing oxidation ponds for biosolid treatment and/or seasonal storage, the discharger shall conduct detailed surveys of existing oxidation ponds and area adjacent to these ponds. The discharger shall take all necessary measures to prevent any impact to the habitat of the southern race of the endangered salt marsh harvest mouse.

8. The Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the discharges governed by this Order are causing or significantly contributing to adverse impacts on water quality and/or beneficial uses of the receiving waters.

9. The Discharger shall review, and update as necessary, its Operations and Maintenance Manual, annually, or within 90 days of completion of any significant facility or process changes. The Discharger shall submit to the Board, by April 15th of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.

10. Annually, the Discharger shall review and update as necessary, its contingency plan as required by Board Resolution No. 74-10. The Discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or implement a contingency plan will be the basis for considering such discharge a willful and negligent violation of this order pursuant to Section 13387 of the California Water code. Plan revisions, or a letter stating that no changes are needed, shall be submitted to the Board by April 15 of each year.

11. The Discharger shall comply with all sections of this order immediately upon adoption.

12. The Discharger shall comply with the Self-Monitoring Program for this order, as adopted by the Board and as may be amended by the Executive Officer.

13. The Discharger shall comply with all applicable items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December, 1986.

14. The discharger shall implement and enforce its approved pretreatment program in accordance with Board Order 89-179 and its amendments thereafter. The discharger's responsibilities include, but are not limited to;

    a. Enforcement of National Pretreatment Standards (e.g., prohibited discharges, Categorical Standard, local limits) in accordance with 40 CFR 403.5 and Section 307 (b) and (c) of the Clean Water Act.

    b. Implementation of the pretreatment program in accordance with legal authorities, policies procedures, and financial provisions described in the General Pretreatment regulations (40 CFR) 403) and its approved pretreatment program.

    c. Submission of annual and quarterly reports to EPA and the State as described in Board Order 89-179, and its amendments thereafter.

15. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, EPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

16. This order expires on July 21, 1998. The Discharger must file a Report of Waste Discharge (Permit application) in accordance with Title 23, Chapter 3, Subchapter 9 of the California Code of Regulations not later than 180 days in advance of such expiration date, as application for issuance of new waste discharge requirements.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on July 21, 1993.

STEVEN R. RITCHIE
Executive Officer

Attachments:

A. Map of Wastewater Facilities and Effluent Discharge Locations
B. Self-Monitoring Program
C. Standard Provisions and Reporting Requirements, December 1986
D. Resolution No. 74-10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

SOUTH BAYSIDE SYSTEM AUTHORITY
SAN MATEO COUNTY

NPDES NO. CA 0038369

ORDER NO. 93-066

CONSISTS OF

PART A, dated December 1986

and

PART B

PART B

SOUTH BAYSIDE SYSTEM AUTHORITY

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT AND INTAKE

Station	Description
A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present, preceding any phase of treatment, and exclusive of any return flows or process sidestreams.

B. EFFLUENT

Station	Description
E-001	At any point in the outfall from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present (may be the same as E-001-D)
E-001-D	At any point in the disinfection facilities for Waste E-001, at which point adequate contact with the disinfectant is assured.

C. RECEIVING WATERS

All C Stations shall be sampled during the period 1 hour preceding to 1 hour following low slack water. During the period preceding low slack water, samples will be collected commencing at the geometric center of the diffuser and at 100 yards, 200 yards, 300 yards, 500 yards, and 1000 yards along a bearing of 325° True N from the geometric center of the diffuser. During the period following low slack water, samples will be collected commencing at the geometric center of the diffuser and at 100 yards, 200 yards, 300 yards, 500 yards, and 1000 yards along a bearing of 145° True N from the geometric center of the diffuser.

Station	Description
C-R	At a point in San Francisco Bay, located in the main ship channel not closer than 3,000 feet easterly of the geometric center of the outfall.

C-1	At a point 100 yards from the geometric center of the outfall diffuser bearing 325 degrees True North.
C-2	At a point 200 yards from the geometric center of the outfall diffuser bearing 325 degrees True North.
C-3	At a point 300 yards from the geometric center of the outfall diffuser bearing 325 degrees True North.
C-4	At a point 500 yards from the geometric center of the outfall diffuser bearing 325 degrees True North.
C-5	At a point 1000 yards from the geometric center of the outfall diffuser bearing 325 degrees True North.
C-6	At a point 100 yards from the geometric center of the outfall diffuser bearing 145 degrees True North.
C-7	At a point 200 yards from the geometric center of the outfall diffuser bearing 145 degrees True North.
C-8	At a point 300 yards from the geometric center of the outfall diffuser bearing 145 degrees True North.
C-9	At a point 500 yards from the geometric center of the outfall diffuser bearing 145 degrees True North.
C-10	At a point 1000 yards from the geometric center of the outfall diffuser bearing 145 degrees True North.
C-11	At a point at the geometric center of the outfall diffuser.

D. LAND OBSERVATIONS

Station	Description
P-1 through P-'n'	Located along the periphery of the waste treatment or disposal facilities, at equidistant intervals, not to exceed 100 feet. (A sketch showing the locations of these stations will accompany each report.)

E. OVERFLOWS AND BYPASSES

Station	Description
OV-1	Bypass or overflows from manholes, pump stations, or collection systems.

Note: Intial SMP report to include map and description of each known bypass or overflow location, and report on pump station alarms, pumping capacity, upstream storage capacity and bypass location.

Reporting: Shall be submitted monthly and include date, time, quantity, and period of each overflow or bypass and measures taken or planned to prevent future occurrences (see Part A, Section G.2.)

II. SCHEDULE OF SAMPLE AND ANALYSIS

A. The schedule of sampling and anaylsis shall be that given as Table I.

I, Steven R. Ritchie, Executive Officer, hereby certify that the following Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional oard's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Board Order No. 93-066.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Exective Officer or request from the Discharger and revisions may be order by the Executive Officer.

STEVE R. RITCHIE
Executive Officer

7/21/93
Effective Date

Attachments:
Table 1
Part A (dated December 1986)

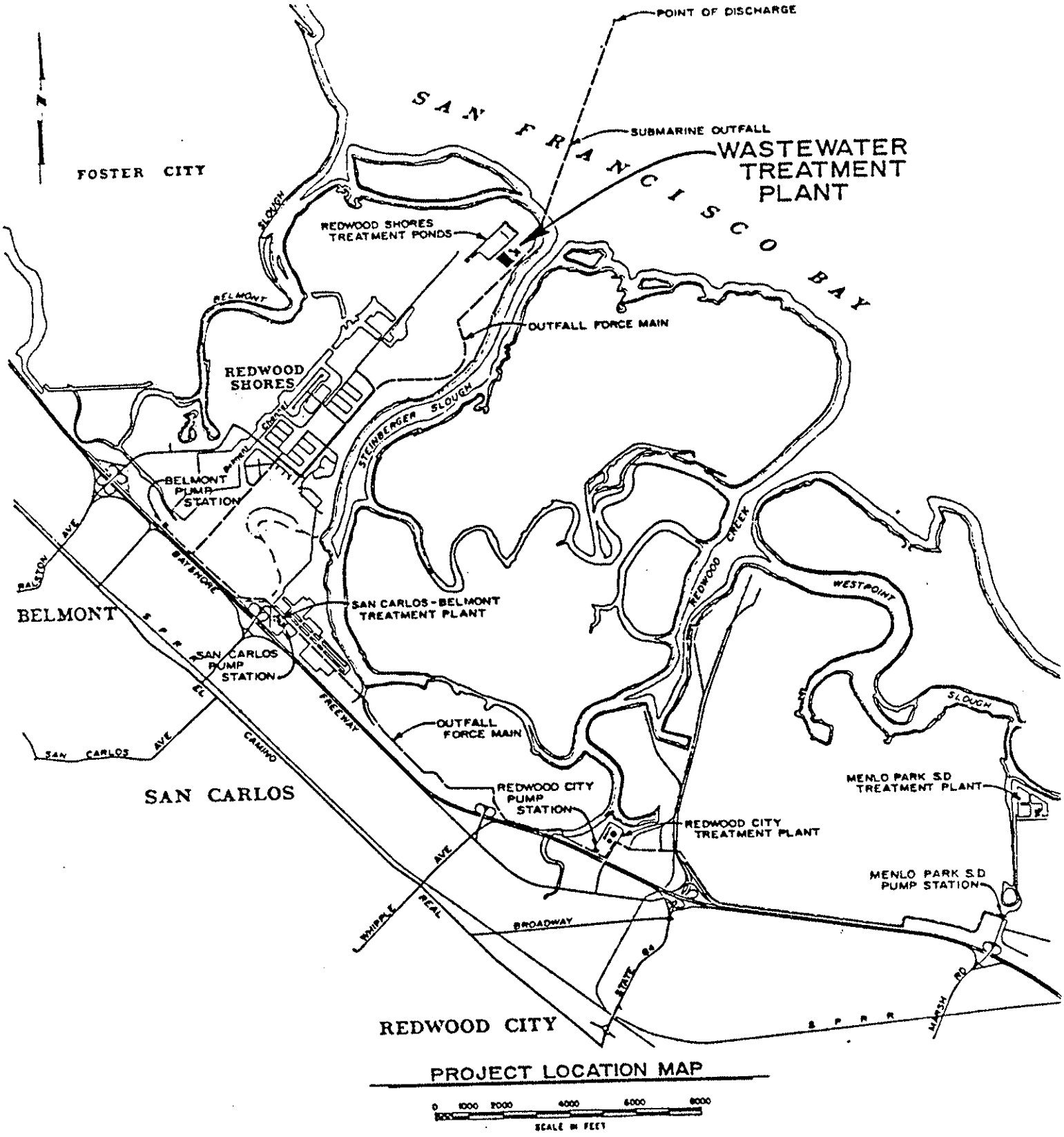
TABLE 1: PROPOSED SCHEDULE FOR SAMPLING, MEASUREMENT, AND ANALYSIS (1)

	Sampling Station:	A-001		E-001			E-001-D			C sta-tions	P sta-tions	Misc Obsv	a-typ sta-tions
	PARAMETER / Sample type:	G	C-24	G (3)	C-24 (3)	CONT	G	C-24	CONT	G	0	0	0
1	Flowrate	mgd							cont				
2	CBOD, 5-day	mg/L,kg/d	2 /W						2 /W				
3	Chlorine Residual&Dosage	mg/L,kg/d						H or	cont				
4	Settleable Matter	ml/L-hr,kg/d	2 /W						2 /W				
5	Total Suspended Matter	mg/L,kg/d	2 /W						2 /W				
6	Oil and Grease	mg/L,kg/d						Q(2)					
7	Coliform, total	MPN/100 mL						3/W					
8	Fish Toxicity, 96-hour, undiluted (6)	%survival							M(7)				
9	Ammonia Nitrogen	mg/L,kg/d						D(7)					
10	Nitrate Nitrogen	mg/L,kg/d											
11	Nitrite Nitrogen	mg/L,kg/d											
12	Organic Nitrogen	mg/L,kg/d											
13	Total Phosphate	mg/L,kg/d											
14	Turbidity	NTUs							D				
15	pH	pH units											
16	Dissolved Oxygen	mg/L, % sat.						D					
17	Temperature	deg C											
18	Apparent Color	color units											
19	Secchi Disc	inches											
20	Total Sulfides (if DO <5.0 mg/L)	mg/L											
21	Dissolved Sulfides (if DO <5.0 mg/L)	mg/L											
22	Arsenic	mg/L,kg/d	Q						Q				
23	Cadmium	mg/L,kg/d	W						Q				
24	Chromium, Total	mg/L,kg/d	W						Q				
25	Copper	mg/L,kg/d	W						W				
26	Cyanide	mg/L,kg/d	W						W				
27	Silver	mg/L,kg/d	W						M				
28	Lead	mg/L,kg/d	W						Q				
29	Mercury	mg/L,kg/d	W						W				
30	Nickel	mg/L,kg/d	W						M				
31	Zinc	mg/L,kg/d	W						Q				
32	Phenolic Compounds	mg/L,kg/d	Q						Q				
33	Applicable Standard Observations	--- ---											
34	Bottom Sediment Analysis & Observ	--- ---											
35	TICH	mg/L,kg/d											
36	Un-ionized Ammonia Nitrogen	mg/L							M				
37	Polycyclic Aromatic Hydrocarbons	mg/L,kg/d							Q				
38	Dewatered Sludge (in drying beds)	--- ---											
39	EPA 8240 &8270	ug/L	Q						Q				
40	Shoreline Bacteriology	MPN/100 mL								M(a)			
41	Selenium	mg/L,kg/d	Q						M				
42	Organic Priority Pollutants(b)								2/y				

pretreatment program monitoring is included here

(a) conduct 2-year study to examine correlation to effluent 240 MPN/100mL disinfection level. If no correlation, discontinue shoreline monitoring.

(b) Organic Priority Pollutants from Section B.6.2 of permit (mg/L & kg/day)



LOCATION MAP: SOUTH BAYSIDE SYSTEM AUTHORITY
1400 Radio Road
Redwood City, California